

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Claims

Claims 1-14 (canceled)

Claim 15 (currently amended): An isolated probe that detects activation of ~~the~~ KDR/Flk-1 ~~receptor~~ and binds tyrosine residue Y1214 of ~~the~~ KDR/Flk-1 ~~receptor~~.

Claim 16 (previously presented): The probe of claim 15, wherein the probe is an antibody.

Claim 17 (previously presented): The probe of claim 16, wherein the probe is a monoclonal antibody.

Claim 18 (previously presented): The probe of claim 16, wherein the probe is a polyclonal antibody.

Claim 19 (previously presented): A composition comprising the probe of claim 15 and a carrier.

Claim 20 (previously presented): A pharmaceutical composition comprising the probe of claim 15 and a pharmaceutically acceptable carrier.

Claim 21 (currently amended): A kit for detecting the activation of ~~the~~ KDR/Flk-1 ~~receptor~~ comprising the probe of claim 15 and reagents for a detection assay.

Claim 22 (currently amended): A method of generating the antibody of claim 16, comprising immunizing an animal with a peptide comprising Y1214 of ~~the~~ KDR/Flk-1 ~~receptor~~ and isolating the antibody from the animal.

Claim 23 (previously presented): The method of claim 22, wherein the animal is a mammal.

Claim 24 (previously presented): The method of claim 22, wherein the peptide comprises SEQ ID NO: 2.

Claim 25 (previously presented): The method of claim 22, wherein the peptide comprises SEQ ID NO: 1.

Claim 26 (currently amended): A method for detecting the activation of ~~the~~ KDR/Flk-1 ~~receptor~~ comprising mixing the probe of claim 15 with a biological sample and detecting a signal which indicates activation of ~~the~~ KDR/Flk-1 ~~receptor~~.

Claim 27 (currently amended): The method of claim 26, wherein detecting the signal comprises determining the phosphorylation state of ~~the~~ KDR/Flk-1 ~~receptor~~.

Claim 28 (currently amended): The method of claim 26, wherein the method further comprises detecting a change in activation state of ~~the~~ KDR/Flk-1 ~~receptor~~.

Claim 29 (currently amended): The method of claim 28, wherein detecting a change in activation state comprises measuring a signal that is proportional to the proportion of Y1214 of KDR/Flk-1 ~~receptor~~ in the phosphorylated or unphosphorylated state.

Claim 30 (currently amended): The method of claim 28, wherein detecting a change in activation state comprises using NMR to follow changes in the phosphorylation state of Y1214 of KDR/Flk-1 ~~receptor~~.

Claim 31 (currently amended): The method of claim 26, wherein the biological sample is obtained from a mammal that has been dosed with a range of concentrations of a ~~KDR/Flk-1~~

KDR/Flk-1 ~~receptor~~ inhibitor and wherein the method further comprises measuring a change in activation state of ~~the~~ KDR/Flk-1 ~~receptor~~.

Claim 32 (currently amended): The method of claim 31, wherein the method further comprises determining an effective dose of the inhibitor by calculating the effective dose of the inhibitor from the measured change in activation state of ~~the~~ KDR/Flk-1 ~~receptor~~.

Claim 33 (currently amended): A method for detecting the presence of ~~the~~ KDR/Flk-1 ~~receptor~~ comprising mixing the probe of claim 15 with a biological sample to detect the presence of ~~the~~ KDR/Flk-1 ~~receptor~~.

Claim 34 (currently amended): A method for measuring the amount of KDR/Flk-1 ~~receptor~~ in a sample comprising mixing the probe of claim 15 with a biological sample and measuring the amount of KDR/Flk-1 ~~receptor~~ in the sample.

Claim 35 (currently amended): The method of claim 34, wherein measuring the amount of KDR/Flk-1 ~~receptor~~ in the sample comprises performing an assay selected from the group consisting of a fluorimetric assay, a chromogenic assay, a radiolabelled assay, and a chemiluminescence assay.

Claim 36 (currently amended): A method of determining whether a chemical compound is an inhibitor of KDR/Flk-1 ~~receptor~~ comprising mixing the probe of claim 15 with a biological sample that has been administered with the chemical compound and measuring the phosphorylation of ~~the~~ KDR/Flk-1 ~~receptor~~ in the sample.

Claim 37 (previously presented): The method of claim 36, wherein the biological sample is obtained from a mammal.

Claim 38 (previously presented): The method of claim 36, wherein the mammal is a human.

Claim 39 (new): The probe of claim 15, wherein the probe is a binding protein.

Claim 40 (new): The probe of claim 16, wherein the antibody is a F(ab')₂ construct, a Fab construct or a single chain Fv construct.

Claim 41 (new): The method of claim 22, wherein the peptide consists of an amino acid sequence of KDR/Flk-1.

Claim 42 (new): The method of claim 24, wherein the peptide consists of SEQ ID NO: 2.

Claim 43 (new): The method of claim 25, wherein the peptide consists of SEQ ID NO: 1.